

## **REQUEST FOR BOARD ACTION**

### **HENDERSON COUNTY BOARD OF COMMISSIONERS**

**MEETING DATE:** February 15, 2017

**SUBJECT:** Kenwood Communications Contract Amendment

**PRESENTER:** Jimmy Brissie, Emergency Management/Rescue Coordinator  
Rocky Hyder, Emergency Services Director

**ATTACHMENTS:** Yes

1. Memorandum
2. Amendment 1 to Radio System Design, Furnish and Install Agreement

#### **SUMMARY OF REQUEST:**

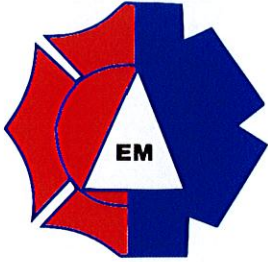
In 2012 Henderson County engaged with JVC/Kenwood for the design and installation of a new emergency communications system. Over the past few months Emergency Management Staff has been working with the City of Hendersonville to identify additional needs for the system to meet expansion requests by the City as well as other system users. The proposed system expansion will add \$140,649.54 to the total project cost. \$125,000 of that total will be billed directly to, and paid by, the City of Hendersonville. The remaining \$15,649.54 will be paid by existing funds remaining in the project budget.

#### **BOARD ACTION REQUESTED:**

The Board is requested to approve Amendment 1 to the Agreement as presented, and authorize the County Manager to execute the necessary documentation.

#### **Suggested Motion(s):**

*I move the Board approve Amendment 1 to the Radio System Design, Furnish and Install Agreement as presented, and authorize the County Manager to execute the necessary documentation.*



# Henderson County Emergency Services

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## Memo

Phone: (828) 697-4728

Fax: (828) 698-6164

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**To:** Rocky Hyder

**Date:** February 6, 2017

**From:** Jimmy Brissie

**Subject:** Radio System Phase 2 Project

**CC:**

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During the summer of 2012 Henderson County accepted bids for a new VHF trunking radio system. After the review of the bids JVC/Kenwood was the successful bidder. As part of the bid process several options were also presented as requested. During June of 2014 Henderson County entered into a contract with JVC/Kenwood for the purchase and installation of the system.

Kenwood Contract Price	\$1,233,224.14
Kenwood Payments as of 11/16	\$1,024,361.78
<i>Original Contract Remaining</i>	<i>\$ 208,862.36</i>

Over the past few months we have been working with JVC/Kenwood, Kimball Communications and the City of Hendersonville to identify additional needs for the system to meet the expansion requested by the City of Hendersonville as well as other system users. The final list of needs referred to as Phase 2 needs were submitted for consideration on November 9<sup>th</sup>, 2016. Those proposed options have been incorporated into a proposed amendment to the original contract by JVC/Kenwood. This amendment encumbers the balance of the original contract, the system expansion by the City of Hendersonville (to be billed directly by Kimball Communications) as well as several optional features included in the original bid documents.

Original Contract Remaining	\$ 208,862.36
City Expansion	\$ 125,000.00 ( <i>billed directly by Kimball Communications</i> )
Additional funds allocated	\$ 15,649.54 ( <i>add'l funds available in the project balance</i> )
Total Amendment Amount	\$ 349,511.90

The proposed Phase 2 expansion upgrades will leave an unencumbered project balance of \$145,128.94. The balance of the funds in the project balance will be used for site contingencies, a trailer for the emergency backup site and a cache of portable radios for large scale events. These costs and needs will be finalized as the Phase 2 expansion progresses.

**AMENDMENT I TO  
RADIO SYSTEM  
DESIGN, FURNISH AND INSTALL AGREEMENT**

This Amendment I to the Radio System Design, Furnish and Install Agreement ("Amendment I") is entered into as of this 9th\_\_ day of January 2017 (the "Effective Date"), by and between KENWOOD USA Corporation n/k/a JVCKENWOOD USA Corporation, a California corporation, with its principle offices located at 2201 East Dominguez Street, Long Beach, CA 90810 USA (hereinafter "KENWOOD") and Henderson County, North Carolina, a North Carolina municipality, with its principle offices at 820 N. Justice Street, Hendersonville, NC 28791 USA (hereinafter "THE AGENCY") (each of KENWOOD and THE AGENCY, a "party" and collectively, the "parties"). Capitalized terms not defined in this Amendment I shall have the meanings set forth in the Radio System Design, Furnish and Install Agreement (the "Agreement").

**RECITALS**

- A. KENWOOD and THE AGENCY entered into the Agreement dated the 20th day of August 2014 whereby THE AGENCY purchased from KENWOOD, and KENWOOD designed, furnished and installed for THE AGENCY a six site NEXEDGE trunked radio system (the "Radio System");
- B. The Term of the Agreement continued until installation and acceptance of the Radio System which completed in May 2016; and
- C. THE AGENCY desires to purchase additional equipment to add to the Radio System, and KENWOOD agrees to provide such additional equipment ("Expanded System") and to extend the Term to include the design and installation of same.
- D. NOW THEREFORE, for good and valuable consideration, the receipt and sufficiency of which is hereby acknowledged, the parties agree as follows:

**AGREEMENT**

- 1. The definition of "Radio System" shall include the "Expanded System" as applicable.
- 2. Section 3.6 shall be added to the Agreement as follows:

**Purchase, Sale and Installation of Expanded System.** Subject to each party's fulfillment of its responsibilities in Section 2, KENWOOD agrees to design, develop, furnish and install the Expanded System that meets the specifications in accordance with the terms and conditions contained in this Agreement and in Exhibits A-1 and A-2 to this Amendment I of the Agreement ("Expanded Specifications"). The AGENCY agrees to purchase the Expanded System exclusively from KENWOOD in accordance with the terms and conditions in this Agreement and in Amendment I to the Agreement. The Expanded Specifications as of the date hereof shall not be amended unless the parties have negotiated and reached agreement with regard to whether KENWOOD is entitled to additional compensation for the design, development and installation of the Expanded System and whether any production schedule for the Expanded System must be amended. In the event the parties reach such agreement, KENWOOD shall, as soon as

commercially practicable, arrange for the design, development and installation of the Expanded System in accordance with such amended Expanded Specifications. In the event the parties can not reach agreement with regard to additional compensation to KENWOOD or KENWOOD determines that it is unable or commercially impractical to arrange for the design, development and installation of the Expanded System in accordance with such amended Expanded Specifications, it shall promptly notify THE AGENCY and the then-current Expanded Specifications shall continue to apply. Notwithstanding the foregoing, KENWOOD shall, in its sole discretion, be entitled to make any modifications to the Expanded System, provided that such modifications or improvements do not adversely affect the performance or location of the Expanded System.

3. This additional language shall be added to Section 5.1 of the Agreement:

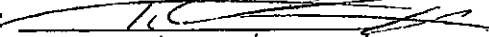
The Parties agree to extend the Term for the period to and including the installation and acceptance of the Expanded System in accordance with Section 3.6 of the Agreement.

4. In the event of inconsistencies between Amendment I to the Agreement and the Agreement, Amendment I shall take precedence.
5. All other terms and conditions of the Agreement remain in full force and effect.

The parties have executed this Amendment I to the Radio System Design, Furnish and Install Agreement as of the Effective Date.

JVCKENWOOD USA Corporation

Henderson County, North Carolina

By:   
Name (Print): Toru Kawachi  
Title: President  
Date: 1/10/2017

By: \_\_\_\_\_  
Name (Print): Steve Wyatt  
Title: County Manager  
Date: \_\_\_\_\_

## EXHIBIT A STATEMENT OF WORK HENDERSON COUNTY NC SYSTEM EXPANSION

### EXPANDED SYSTEM

KENWOOD will provide the repeaters, amplifiers, and associated hardware as provided in Exhibit B to add one traffic channel at each of the six (6) existing county owned NEXEDGE sites.

KENWOOD will work with its FCC licensing consultant to acquire the frequencies for the expansion. The cost of the licensing service is included as part of the purchase price.

Our licensing consultant is paid in advance and the associated cost included in our proposal shall not be refundable to THE AGENCY.

KENWOOD will be responsible for installation, configuration, and testing of the additional traffic channel at each of the sites.

Installation will be performed by a KENWOOD authorized service subcontractor, and the work will be completed under the supervision of a KENWOOD field project technician.

KENWOOD is responsible for expanding the existing transmit antenna combiner and receiver multi-coupler at each of the sites. The expansion is assuming the FCC will grant frequencies which will allow for expansion without adding additional antennas. No allowance has been made for additional antennas, tower climbs, or hardware to support the antennas if it becomes necessary to add to the existing antenna network.

Installation of the hardware to expand the antenna network combiner is included in the purchase price provided below and will be performed by a KENWOOD authorized service subcontractor and supervised by a KENWOOD field project technician.

KENWOOD cannot be held responsible for changes in previously predicted or current coverage.

The Expanded System includes hardware necessary to interface ESChat PTT over cellular devices to the County NEXEDGE radio system. ESChat is an independent provider with services requiring a monthly subscription fee per device to ESChat by THE AGENCY.

Installation and configuration of the Expanded System will be provided by a KENWOOD authorized service subcontractor and supervised by a KENWOOD field project technician.

## **TRANSPORTABLE SITE**

The transportable site is a 4 channel standalone NEXEDGE VHF trunked system. Included are a system bridge and talk path licenses for future interoperability. The Expanded System will include and function as a standalone trunked site. IP site connectivity will be required for interoperability with other systems. Site connectivity shall be provided by THE AGENCY and is not included as part of this Statement of Work.

The Expanded System includes estimates for the antenna combiner and receiver multi-coupler. Additional fees may be required based on available frequencies.

KENWOOD will optimize the Expanded System to meet the FCC ERP; however, KENWOOD is not responsible for coverage predictions.

The Expanded System will be configured and installed by a KENWOOD authorized service subcontractor supervised by a KENWOOD field project technician

## **Assumptions**

This Statement of Work is based on KENWOOD's assumptions set forth below. If any of these assumptions are found to be incorrect, KENWOOD and THE AGENCY will work reasonably together during Critical Design Review to address the concerns to minimize any financial impact to THE AGENCY.

### **Sites**

- THE AGENCY will supply adequate physical space at identified sites for the installation, use, and maintenance of the system. New site development by KENWOOD is not required.
- THE AGENCY will provide electrical work and installation of concrete mounting pad if required for outdoor cabinets.

- THE AGENCY will provide adequate temperature/environmental control, grounding and lightning protection at existing sites.
- THE AGENCY will provide space adequate for the installation, use, and maintenance of the EXPANDED SYSTEM at all sites to include adequate distribution, and source power. Necessary upgrades are the responsibility of THE AGENCY.
- Ready access to all facilities will be available as necessary during the installation period. To reduce the number of days in the field during installation, access is frequently necessary for 10 working hours per day (e.g. 7 am to 6 pm). It is understood that access to sites controlled by other agencies may be limited and therefore access may be constrained by normal hours of operation of the building.

#### Network

- AGENCY is responsible for adequate bandwidth and additional upgrades if necessary AGENCY supplied backhaul network links must support additional traffic IP addresses are available for use in blocks of sufficient quantity on any existing network to accommodate routing between the sites and equipment specified.

#### RF Equipment

- KENWOOD will be responsible for the RF equipment frequency planning based on the available licensed frequencies.

#### Services

- Site access, where applicable, is the responsibility of THE AGENCY. The typical work day will be 10 to 12 hours; KENWOOD has not included any cost associated with site preparation services or site escorts.
- By using good installation practices and proper planning, loss of service may be minimized; however, KENWOOD will not be responsible for the loss of any service on a site. This disclaimer covers all services including, but not limited to, cellular, Internet, cable TV, existing LMR, etc.
- Third party services procurement and management are the responsibility of THE AGENCY unless stated otherwise in the Statement of Work.

- Subscriber programming necessary to handle changes in any existing system is already in place or will be handled by THE AGENCY.

#### Products

- Software and hardware as specified in the Statement of Work are generally released KENWOOD solutions. No tailoring of existing features or new feature development will be performed unless otherwise stated in the proposal.

#### Responsibilities and Scope of Work

##### Responsibilities

Because the Expanded System will incorporate major elements owned/managed by THE AGENCY, this proposal requires a clear definition of responsibilities.

THE AGENCY will provide and manage:

- All communication system sites, to include acquisition or site access, shelter and tower space, HVAC, and sub-surface grounding provisions
- - 120 VAC utility power supply at all sites
- THE AGENCY support for site escort or access permissions during new-system installation, and for first-response maintenance support during the warranty period

KENWOOD will provide, install, test and provide first-year warranty and maintenance on the Enhanced System equipment provided in Exhibit B commencing at the earlier of system acceptance or beneficial use which means use of the Enhanced System for operational purposes and not for training or testing purposes. Warranty shall be provided in accordance with

KENWOOD's then current warranty statement, and on-site maintenance shall be provided by KENWOOD through its local service provider during business hours of 8:30 am – 5:00 pm local time as part of the purchase price. Response times after the above regular business hours shall be invoiced at then current after-hours rates.



**Purchase Price:**

Site RF upgrade hardware	\$25,119.75
PTToC hardware	\$14,537.00
Licensing	\$37,710.00
Antenna combining expansion hardware	\$120,844.90
Transportable hardware/software	\$67,325.25
Site RF upgrade labor	\$31,500.00
PTToC installation labor	\$12,475.00
Antenna combining installation labor	\$31,500.00
Transportable installation labor	\$8,500.00
<u>Project summary</u>	
Invoiced from Kimball Communications	\$125,733.20
Invoiced from JVCKENWOOD	\$223,778.70
Project Total	\$349,511.90

ESChat subscription: \$175.00 per month\*

The above equipment will be invoiced upon shipment, and partial shipments are allowed. Labor will be invoiced upon completion.

\*Requires a separate subscription agreement between THE AGENCY and ESChat.

**EXHIBIT A-2**

**Description:** Site Upgrades to add Channels  
**Technology:** NEXEDGE™ Digital 6.25kHz  
**# of Channels:** 1 channel per site (6 sites)  
**# of Sites:** 6

<b>Site Upgrades</b>					
<b>Equipment part number:</b>	<b>Description</b>	<b>List Price</b>	<b>Sales Price</b>	<b>Quantity</b>	<b>Extended Sales Price</b>
NXR-5700K	VHF Nexedge 146-174 mHz Repeater	\$ 5,333.00	\$ 3,999.75	1	\$ 3,999.75
KSGPA22543	150W Continuous Duty Amplifier	\$ 3,060.00	\$ 2,295.00	1	\$ 2,295.00
KSGPG92800	Option needed to enable the trunking features	\$ 1,500.00	\$ 1,125.00	1	\$ 1,125.00
KSGPA22543	150W Continuous Duty Amplifier	\$ 3,060.00	\$ 2,295.00	5	\$ 11,475.00
KSGPG92800	Option needed to enable the trunking features	\$ 1,500.00	\$ 1,125.00	5	\$ 5,625.00
KSGLOT	Misc. shop supplies, jumper cables, & inter cable wiring	\$ 800.00	\$ 600.00	1	\$ 600.00
				<b>Total:</b>	<b>\$ 25,119.75</b>

<b>Raven Connectivity</b>					
<b>Equipment part number:</b>	<b>Description</b>	<b>List Price</b>	<b>Sales Price</b>	<b>Quantity</b>	<b>Extended Sales Price</b>
47800A-FLXG	M4x Flex Gate Enterprise System		\$ 6,492.00	1	\$ 6,492.00
47800-004-EEEE	M4x Blade Tray with 4 DVSI Modules		\$ 4,895.00	1	\$ 4,895.00
47800-004-DD00	M4x Tray for chassis, 4 port, 2/4 wire		\$ 2,625.00	1	\$ 2,625.00
W635	Hqi-Client Software		\$ 525.00	1	\$ 525.00
WBL001	1 user license billed monthly - ES Chat		\$ 5.00	35	\$ 175.00
Installation	Labor on installation (Kimball \$7,975:JVCK-\$4500)		\$ 12,475.00	1	\$ 12,475.00
				<b>Total:</b>	<b>\$ 27,187.00</b>

<b>System Programming, Optimization &amp; Installation</b>					
<b>Equipment part number:</b>	<b>Description</b>	<b>List Price</b>	<b>Sales Price</b>	<b>Quantity</b>	<b>Extended Sales Price</b>
KSGTECH	On Site Factory Technical Assistance	\$ 4,500.00	\$ 4,500.00	1	\$ 4,500.00
KSGLIC	Licensing additional channels	\$ 37,710.00	\$ 37,710.00	1	\$ 37,710.00
LABOR	Labor on installation - 5th channel(Kimball)	\$4,500.00	\$ 4,500.00	6	\$ 27,000.00
				<b>Total:</b>	<b>\$ 69,210.00</b>

WBI001 billed separate by ESChat

<b>Site Upgrades</b>	<b>\$ 121,516.75</b>
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**Description:** 1 Site 4 Channels VHF Nexedge Trunked Digital System  
**Technology:** NEXEDGE™ Digital 6.25kHz  
**# of Channels:** 4 Channels  
**# of Sites:** Transportable Single Site

<b>Site 1</b>					
<b>Equipment part number:</b>	<b>Description</b>	<b>List Price</b>	<b>Sales Price</b>	<b>Quantity</b>	<b>Extended Sales Price</b>
NXR-5700K	VHF Nexedge 136-174 mHz Repeater, 25W, 0.5ppm TCXO built-in	\$ 5,333.00	\$ 3,999.75	4	\$ 15,999.00
KSGPG91800	Repeater Trunking FeatureNote	\$ 1,500.00	\$ 1,125.00	4	\$ 4,500.00
KSGPGKEYSM	System Manager Software and Secure USB Key Package (KPG-110SMK, KSGPGKEY01)	\$ 583.00	\$ 437.25	1	\$ 437.25
KSGPS500100	100A N+1 Power Supply	\$ 1,010.00	\$ 757.50	2	\$ 1,515.00
KSGMRCK7	45 RU Aluminum Equipment Rack	\$ 1,250.00	\$ 937.50	1	\$ 937.50
KSGTXRX-4	Combining (estimate) (Peg Rack)	\$ 18,967.00	\$ 14,225.25	1	\$ 14,225.25

KSG9135G5000	UPS Power Supply System	\$ 4,690.00	\$ 3,517.50	1	\$ 3,517.50
KSGNS10008	8 Port Managed Network Switch	\$ 242.00	\$ 181.50	1	\$ 181.50
KSGCP2000	Customer Rack Mounted Server	\$ 4,875.00	\$ 3,656.25	1	\$ 3,656.25
KPG-157SB	NEXEDGE Bridge Software	\$ 12,500.00	\$ 9,375.00	1	\$ 9,375.00
KSGPG92010	System Group Call Path License	\$ 10,000.00	\$ 7,500.00	1	\$ 7,500.00
KSGPGKEY03	Grade-1 Unlimited Access Secure USB Programming Key	\$ 167.00	\$ 125.25	1	\$ 125.25
KSGCP20000	Custom Rack Mounted Server	\$ 5,500.00	\$ 4,125.00	1	\$ 4,125.00
L-8518	Labor for installing and loading Linux OS and application Software	\$ 750.00	\$ 562.50	1	\$ 562.50
KSGMS100P1	Power Strip	\$ 91.00	\$ 68.25	1	\$ 68.25
KSGLOT	Misc. shop supplies, jumper cables, & inter cable wiring	\$ 800.00	\$ 600.00	1	\$ 600.00
Labor	Labor on installation (Kimball)	\$ 8,500.00	\$ 8,500.00	1	\$ 8,500.00
				<b>Total</b>	<b>\$ 75,825.25</b>

**Description:** Henderson VHF Nexedge Trunked Digital System  
**Technology** NEXEDGE™ Digital 6.25kHz  
**# of Channels** Would provide total of 8 Channels per site  
**# of Sites** Additional 3 ch per site combining

Equipment part number:	Description	List Price	Sales Price	QTY	Extended Sales Price
KSGTXRX-4	Combining (estimate) (Peg Rack)	\$ 18,967.00	\$ 14,225.25	6	\$ 85,351.50
KSGMN10629	MEXM-1 I/O expansion panel, 24 analog in, 24 digital in, 24 Form-C relays	\$ 3,931.24	\$ 3,106.00	6	\$ 18,636.00
40730230	Newton Instrument 4070-230 standoff brackets (pair)	\$ 57.50	\$ 57.50	6	\$ 345.00
PM-2A-300	RF Power Monitor	\$ 312.00	\$ 280.80	18	\$ 5,054.40
KSGCB00114	Repeater Interface Cable	\$ 50.00	\$ 45.00	18	\$ 810.00
KSGCN10120	N/M to N/M Barrel Coax Connector	\$ 20.00	\$ 18.00	36	\$ 648.00
KSGTECH	On Site Factory Technical Assistance	\$ 4,500.00	\$ 4,500.00	1	\$ 4,500.00
Contingency	Antenna, frequency contingency	\$ 10,000.00	\$ 10,000.00	1	\$ 10,000.00
Labor	Labor on installation (Kimball)	\$ 4,500.00	\$ 4,500.00	6	\$ 27,000.00
				<b>Total</b>	<b>\$ 152,344.90</b>